

# Notice of Allowability

Application No.

09/696,079

Examiner

Ngoc K. Vu

Applicant(s)

YOSHIDA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/27/04.
2. ☒ The allowed claim(s) is/are 20-22, 24-35, 37 and 39.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____  |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment ✓                  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance ✓ |
|   | 9. <input type="checkbox"/> Other _____  |

***Drawings***

1. The drawing of Figure 12B filed 10/25/2000 is missing. Applicant is required to submit the missing drawing. No new matter may be introduced in the required drawing.

**EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Bujold and Jay Franklin on May 11, 2005.

The application has been amended as follows:

In the claims:

Claim 20, line 4, after "frequency-converting an", --original-- has been inserted.

Claim 20, line 16, after "frequency-converting", "an" has been changed to --the--.

Claim 20, line 16, --subscriber-- has been inserted before "terminal device".

Claim 20, line 21, after "transmission device", "provided on a transmission path from the down-converter to the each terminal, the up-converter and the down-converter" has been replaced with --, the up-converter, and the down-converter, the transmission device is provided on a transmission path from the down-converter to each terminal--.

Claim 21, line 4, --original-- has been inserted after "frequency-converting an".

Claim 21, line 16, after "frequency-converting", "an" has been changed to --the--.

Claim 21, line 16, --subscriber-- has been inserted before "terminal device".

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Claim 21, line 21, after "transmission device", "provided on a transmission path from the down-converter to the each terminal, the up-converter and the down-converter" has been replaced with --, the up-converter, and the down-converter, the transmission device is provided on a transmission path from the down-converter to each terminal--.

Claim 22, line 4, --original-- has been inserted after "frequency-converting an".

Claim 22, line 16, after "frequency-converting", "an" has been changed to --the--.

Claim 22, line 16, --subscriber-- has been inserted before "terminal device".

Claim 22, line 19, after "loss in", "the frequency" has been changed to --a frequency--.

Claim 22, line 21, after "provided on", "at least one of ... the down converter" has been replaced with --an output path of the up-ward signal in the down-converter and on an input path of the up-ward signal in the up-converter; and the trap circuit is provided in at least one of the transmission device, the up-converter and down-converter, the transmission device is provided on a transmission path from the down-converter to each terminal.--

Claim 23 has been canceled.

Claim 24, line 6, --original-- has been inserted after "frequency-converting an".

Claim 24, line 18, after "frequency-converting", "an" has been changed to --the--.

Claim 24, line 18, --subscriber-- has been inserted before "terminal device".

Claim 24, line 25, after "up-converter", "at the terminal side" has been deleted.

Claim 25, line 9, after "up-converter", "at the terminal side" has been deleted.

Claim 26, line 6, --original-- has been inserted after "frequency-converting an".

Claim 26, line 18, after "frequency-converting", "an" has been changed to --the--.

Claim 26, line 18, --subscriber-- has been inserted before "terminal device".

Claim 26, line 22, --subscriber-- has been inserted before "terminal device".

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Claim 26, line 23, after "the up-converter", "for generating the" has been changed to --for generating a--.

Claim 26, line 24, --original-- has been inserted before "upward signal".

Claim 26, line 24, --subscriber-- has been inserted after "outputted from the".

Claim 26, line 26, --original-- has been inserted before "upward signal".

Claim 26, line 27, --subscriber-- has been inserted before "terminal device".

Claim 26, line 27, --original-- has been inserted before "upward signal".

Claim 26, line 28, --original-- has been inserted after "by mixing the".

Claim 26, line 30, after "the terminal", "side" has been deleted.

Claim 27, line 5, --subscriber-- has been inserted before "terminal device".

Claim 27, line 6, after "the up-converter", "for generating the" has been changed to --for generating a--.

Claim 27, line 7, --original-- has been inserted before "upward signal".

Claim 27, line 8, --subscriber-- has been inserted before "terminal device".

Claim 27, line 9, --original-- has been inserted before "upward signal".

Claim 27, line 10, --subscriber-- has been inserted before "terminal device".

Claim 27, line 10, --original-- has been inserted before "upward signal".

Claim 27, line 11, --original-- has been inserted after "by mixing the".

Claim 27, line 13, after "the terminal", "side" has been deleted.

Claim 27, line 14, --original-- has been inserted before "upward signal".

Claim 27, line 15, --subscriber-- has been inserted before "terminal device".

Claim 28, line 6, --original-- has been inserted after "frequency-converting an".

Claim 28, line 18, after "converting", "an" has been changed to --the--.

Claim 28, line 18, --subscriber-- has been inserted before "terminal device".

Claim 28, line 28, after "signal path", --, wherein the trap is provided in at least one of the transmission device, the up-converter, and the down-converter, the transmission device is provided on a transmission path from the down-converter to each terminal-- has been inserted.

Claim 30, line 4, --original-- has been inserted before "upward signal".

Claim 30, line 16, after "frequency-converting", "an" has been changed to --the--.

Claim 30, line 16, --subscriber-- has been inserted before "terminal device".

Claim 30, line 18, --subscriber-- has been inserted before "terminal device".

Claim 30, line 21, --subscriber-- has been inserted before "terminal device".

Claim 30, line 23, --subscriber-- has been inserted before "terminal device".

Claim 30, line 24, after "means for generating", "the" has been changed to --a--.

Claim 30, line 25, --original-- has been inserted before "upward signal".

Claim 30, line 25, --subscriber-- has been inserted before "terminal device".

Claim 30, line 27, --original-- has been inserted before "upward signal".

Claim 30, line 28, --subscriber-- has been inserted before "terminal device".

Claim 30, line 28, --original-- has been inserted before "upward signal".

Claim 30, line 29, "transmitted from the terminal device side of the upward signal path and" has been replaced with --with--.

Claim 30, line 31, after "the terminal", "side of" has been replaced with --on--.

Claim 30, line 36, after "terminal", "side" has been deleted.

Claim 30, line 37, after "means frequency-converts", --,-- has been inserted.

Claim 33, line 5, --subscriber-- has been inserted before "terminal device".

Claim 33, line 7, --subscriber-- has been inserted before "terminal device".

Claim 33, line 8, after "means for generating", "the" has been changed to --a--.

Claim 33, line 9, --original-- has been inserted before "upward signal".

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Claim 33, line 9, --subscriber-- has been inserted before "terminal device".

Claim 33, line 11, --original-- has been inserted before "upward signal".

Claim 33, line 12, --subscriber-- has been inserted before "terminal device".

Claim 33, line 12, after "by mixing the", --original-- has been inserted.

Claim 33, line 13, --subscriber-- has been inserted before "terminal device".

Claim 33, line 13, after "terminal device", "side of the upward signal path" has been deleted.

Claim 33, line 15, after "the terminal", "side of" has been replaced with --on--.

Claim 33, line 20, after " the terminal", "side" has been deleted.

Claim 33, line 21, after "means frequency-converts", --,-- has been inserted.

Claim 33, line 22, "the phase-inverted" has been changed to --a phase-inverted--.

Claim 36 has been canceled.

Claim 37, line 4, --original-- has been inserted before "upward signal".

Claim 37, line 16, --original-- has been inserted before "upward signal".

Claim 37, line 16, --subscriber-- has been inserted before "terminal device".

Claim 37, line 22, after "frequency signal", --,-- has been inserted.

Claim 37, line 22, after "a phase-inverted high frequency signal", "whose phase is inverted against a phase of the high frequency signal" has been deleted.

Claim 38 has been canceled.

Claim 39, line 2, --original-- has been inserted before "upward signal".

Claim 39, line 3, --subscriber-- has been inserted before "terminal device".

3. The following is an examiner's statement of reasons for allowance:

The closest prior art, Gurusami (US 5,557,319 A) teaches transmitting return communications in a two-way system. Particularly, return signals from subscriber devices are up-converted to signals in a higher frequency band for transmission on the subscriber premises local bus to the gateway device where they are down-converted for transmission over the network. Gurusami, either singularly or in combination, fails to anticipate or render the limitations obvious such as the features of the trap circuit is constituted by connecting a resonance circuit to the transmission path of the in-building upward signal via an inductive reactance/ a capacitive reactance as recited in claims 20 and 21; the feature of an equalizer for compensating a transmission loss in a frequency band of the in-building upward signal as recited in claim 22; the features of a frequency conversion means of the down-converter and a trap circuit as recited in claim 24; the features of a frequency conversion means of the up-converter and a trap circuit as recited in claim 26; the features of a signal amplification means and a trap circuit as recited in claim 28; the features of a frequency conversion means, the noise removal means is provided in the up-converter and a high frequency signal removal means as recited in claim 30; the features of a high frequency signal removal means as recited in claim 37.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 571-272-7306. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ngoc K. Vu  
Primary Examiner  
Art Unit 2611

May 23, 2005